



DESC IRP Stakeholder Advisory Group Session XII Meeting Minutes

July 12, 2023

Meeting Participants

DESC

- Betty Best
- Eric Bell
- Andrew Walker
- Heather Eades
- Westy Westmoreland
- Rose Jackson
- Scott Parker
- Bradley Perricelli
- Brian Ulmer
- Jim Neely
- Sheryl Shelton
- Therese Griffin
- Adam Bidwell
- Iris Griffin
- Amanda Prestage
- Joseph Stricklin
- Danny Kassis
- Darrin Kahl

CRA

- James Russell
- Jeff Plewes
- Cyrus Sabharwal

Advisory Group

- Anna Sommer
- Eddy Moore
- Ryan Deyoe
- Forest Bradley Wright
- Chelsea Hotaling
- Emma Clancy
- Hamilton Davis
- Kate Mixson
- O'Neil Morgan
- Findlay Slater
- Jeff Gordon
- Brian Manley
- Jake Duncan
- Bri Ziegenhagen
- Evelyn Mendez
- Jake Griffin
- Phil Hayet
- Savannah Brock



Agenda

- I. Status Update & Stakeholder Feedback
 - DESC IRP Process & Schedule Update
 - Review of Stakeholder Homework from Session XI
- II. IRA – Energy Communities
- III. IIJA & Electrification
- IV. Gas Supply Planning
- V. 2022 TIA Results and 2023 TIA
- VI. Planning for Session XIII and Next Steps
 - Session XII Homework
 - Stakeholder Questions



Session XII Minutes

Welcome

Mr. James Russell from CRA opened Session XII, highlighting the meeting's focus on a few key topics that were mutually agreed upon by Stakeholders at Session XI, including the IRA & IIJA, gas supply planning, 2022 TIA results and the 2023 TIA. Stakeholders had expressed an interest in hearing from subject matter experts at DESC on priority topics, so Heather Eades, Westy Westmoreland, Rose Jackson, and Scott Parker agreed to present and support two-way dialogue between the Company and Stakeholders.

Mr. Russell then reminded the advisory group that DESC requests Stakeholders submit questions through the chat function and that Stakeholders would have an opportunity for dialogue after the initial response to their question was provided. He explained to the advisory group that all questions submitted in chat would be answered, and that any not addressed live in the meeting would be responded to in writing on DESC's IRP Stakeholder Advisory Group website.

Stakeholder Group Schedule and Process Update

Mr. Russell then moved on to discuss the schedule of stakeholder meetings. He began by stating that the 2023 IRP Procedural Schedule could conclude in November, and that the IRP Stakeholder Advisory Group topics relating to the 2024 IRP Update will be occurring in parallel. He explained that during Session XIII, in October, winter load forecast and EV load management would be discussed. Looking into January, Session XIV will prioritize the 2024 IRP Update and OSW modeling approaches.

Status Update and Stakeholder Feedback

Mr. Russell continued to a brief discussion of the homework responses from Session XI. He highlighted the four main question topics, which were general feedback, IRA & IIJA, gas supply planning, and the 2022 TIA results. Stakeholders had previously received the slides in advance and were asked to come with questions if clarification was needed on any of DESC's responses. All questions and answers from this session are documented in the Appendix Table 1: Questions 1 to 14. Next, Mr. Russell turned things over to Mr. Eric Bell of DESC to discuss energy communities.

IRA – Energy Communities

Mr. Eric Bell began by noting that the energy community discussion today would center on the geography of the energy communities within DESC service territory. He explained that there is an additional 10% tax credit available for locating a renewable energy facility within these energy communities. He stated that this is a topic currently in discovery, so further details will be provided after the litigation period. Mr. Bell, using maps of DESC service territory and energy communities in South Carolina, illustrated that the actual DESC service territory is a subset of areas within DESC's portion of the state (roughly the area encompassed by Columbia, Charleston, Beaufort, and Aiken). He expanded on this, showing a map containing an overlay of DESC's service territory and the Energy Communities. The areas where both co-exist is relatively small. Additionally, one of the largest energy community sites, located near Augusta, would be challenging to build since it is Federal land within the Savannah



River Site. After fielding questions from Mr. Moore and Mr. Deyoe, which are noted in Appendix Table 1: Questions 15-16 Mr. Russell handed things over to Ms. Heather Eades.

IIJA and Electrification

After introducing herself, Ms. Eades gave Stakeholders a brief overview of the Infrastructure Investment and Jobs Act, or IIJA. She noted that the IIJA was passed in 2021, and invests over a trillion dollars across various industries, including energy. Some areas of emphasis are EVs, electric buses, and electric infrastructure. She then continued, explaining that there are 35 programs and \$51 billion directly relevant to the electric industry and 44 programs and \$131 billion that are indirectly relevant. Direct means that DESC can directly apply for funding, while indirect means other entities apply for funding and DESC supports. She also presented a pie chart presenting more detailed areas of funding and noted the large portion of funding available for electrification and alternate fuels, grid infrastructure resilience and reliability, CCUS, and renewable generation. She then provided some specific examples of IIJA applications DESC has submitted, such as the South Carolina Optimization for Resilient Energy (SCORE). Ms. Eades explained that the DOE has a two-step process that will begin with either a concept paper or a letter of intent. If a concept paper is encouraged, the applicant may send in a full application. So far, DESC has been encouraged on one application and discouraged on another. Ms. Eades noted that for the funding opportunity in which DESC was discouraged from submitting a full application, only about 22% of the concept papers were encouraged, so DESC is doing well so far in a very competitive environment. She added that there are four letters of intent submitted for hydroelectric projects and then moved on to questions. After answering a question from Ms. Sommer, which is noted in Appendix Table 1: Question 17, Mr. Westy Westmoreland introduced himself and began the electrification portion of the meeting.

Mr. Westmoreland began the electrification section by introducing DESC's transportation roadmap. He went over DESC's priorities relating to electric transportation, including ease of adoption, universal access, and supporting demand growth. Mr. Westmoreland moved on to talk about the EV charging network within DESC service territory. He noted that a majority of EV travel is within a short distance of home; but it is a priority to promote EV adoption by ensuring access to EV charging stations for longer distance travel. He mentioned that DESC supports the charging network by working on siting locations with respect to infrastructure. He then highlighted that there are 15 stations with 144 ports currently active, and there are another 12 stations with 130+ ports in development. He noted that the charging stations are almost exclusively from Tesla, but that in 2024 other OEMs will be able to use Tesla charging stations. Mr. Westmoreland then moved on to showcase some of the other electric transportation initiatives. These include grants for 165 electric school buses, heavy duty electric transit buses for the Charleston Area Rapid Transit Authority, and two future electric buses for the Columbia Comet transit system. He noted that DESC is paying special attention to the infrastructure associated with charging the electric school buses so that kids can take clean transportation to school as soon as possible.

Mr. Westmoreland transitioned to talking about charging on-site with on-bill financing. He mentioned that the on-bill program was recently approved. The on-bill solution is separately metered for consumers to charge where they live and/or work. There is also a passive managed charging component that incentivizes off-peak charging. He then covered how the site host owns the equipment and pays a flat monthly fee for the financing and O&M cost. He added that the network provider would remit the



revenue from the EV charging back to the site host to offset the cost of providing the service. Mr. Westmoreland finished this section by telling Stakeholders about the first installation that was recently completed. Mr. Russell continued the meeting by turning over to Ms. Rose Jackson to discuss gas supply planning.

Gas Supply Planning

Ms. Jackson introduced herself and proceeded to provide an update on the DESC gas supply planning process. She began by updating Stakeholders on a joint project between DESC and Santee Cooper, for which an RFP has been issued and responses have been received. She stated that Canadys is the preferred site for the Shared Resource, and that DESC will move forward with evaluating the location and supply options. Ms. Jackson then moved on to talk about the Mountain Valley Pipeline (MVP) update. She began by noting that DESC has contracted for 62,500 Dekatherms of mainline capacity. The project is about 94% complete, with an expected completion date between Q4 of 2023 and Q2 of 2024. She then received questions from various Stakeholders, which are noted in Appendix Table 1: Questions 18-22. Mr. Scott Parker then took over to speak on the 2022 TIA results and 2023 TIA status.

2022 TIA Results and 2023 TIA

Mr. Parker gave a brief summary of the 2022 TIA results, which were issued in March 2023. He explained that there were six cases studied, of which three were focused on Wateree retirement by end of 2028 and the remaining three were focused on Williams retirement by end of 2030. He added that the best and worst case results are provided in this report for Stakeholders to review. Mr. Parker moved on to talk about the first three cases and their specific best and worst case scenarios, which notably differ in terms of cost and completion time. He transitioned into speaking on cases 4-6, which are split up into several sub-cases to account for various assumptions. Additionally, there was a supplemental case studied only for Wateree retirement by end of 2028. Mr. Parker closed out this section by giving an update on the status of the 2023 TIA. He went over the two cases, which involve Williams and Winyah retirements by the end of 2030, and mentioned that studies will be conducted jointly with Santee Cooper. He explained that studies are underway, assumptions have been completed and initial power flow simulations are complete. Results from the 2023 TIA study are expected to be complete in Q3 2023. He took questions from various Stakeholders, which are noted in Appendix Table 1: Questions 23-31.

Additional Q&A and Homework

Mr. Russell began to wrap up the meeting, asking Stakeholders for homework responses by July 24, 2023. He mentioned that the next meeting will take place in the fall, and priority topics will be the winter load forecast and EV load management. Mr. Russell concluded the meeting by thanking the Stakeholder Advisory Group for their time and reiterating that additional questions can be submitted through the Stakeholder website or emailed to DESC-IRP-Group@crai.com.



**Appendix Table 1: DESC IRP Session XII
Q&A**

	Question / Comment	From	Topic	Answer
1	In the question about ELG upgrades on Wateree, I'm not sure what is meant by constructive conclusion of the Urquhart RFP and why one is contingent on the other.	Anna Sommer	General Feedback from Session XI	The Company does not plan to conduct the Wateree Replacement RFP until the Urquhart RFP is complete.
2	Follow up to question 1 – What is the next step in the Urquhart process for Stakeholders?	Anna Sommer	General Feedback from Session XI	The Company filed a letter with the Commission stating that all parties have requested the Commission to hold the docket in abeyance pending further discussion between the parties.
3	On the slide regarding ELG upgrades - Do you have to continue to make required upgrades or complete upgrades by December 31, 2025?	Phil Hayet	General Feedback from Session XI	Under the current effective ELG rule, if a company is going to avail itself of the retirement glide path, an affirmative election has to be made to the permitting authority by 12/31/2025. For DESC, an election would be filed with the South Carolina Department of Health and Environmental Control, availing DESC of that option and at that point DESC will be released from the obligation to continue compliance activities toward a 2028 compliance deadline. If Wateree is not going to retire by 2028, a commitment needs to be made by 12/31/2025 and



				Wateree will have until 2028 to comply with upgrades.
4	With respect to DESC planning to conduct competitive procurement activities for Wateree replacement - What does that look like from DESC's perspective regarding which technologies and level of capacity are in the RFP?	Anna Sommer	General Feedback from Session XI	Please refer to the 2023 IRP and direct testimony around what that Wateree replacement may look like. Conceptually, the consideration has been an all-source RFP. How much capacity and whether there is a hard number, is not known yet.
5	Are the EE savings resulting from IRA-funded improvements appearing in the load forecasts? The response points to the DSM potential study and ongoing discussions about program design which I understand both to be utility-funded EE savings. I believe the company has already done this on the EV side – i.e. incentives from the IRA on EVs is reflected as an increase in load. Has that been done for non-utility IRA-funded EE projected savings?	Forest Bradley Wright	IRA & IIJA	DESC has clearly stated reasons and provided responses as to why it was inappropriate to apply the IRA in the DSM Potential Study. The Company does not yet know how the IRA funding will be supplied in SC, so there were no plans to apply it to the 2023 DSM Potential Study.
6	Follow up to question 6: I think you're getting at the point of clarification I'm referring to - This would be for be for non-utility EE savings. In essence, before the IRA there would be non-utility, or naturally adopted EE. With this infusion of new funding, there ought to be an increase in naturally occurring EE that would not appear in the DSM potential study. I'm asking about non-Dominion EE savings that result from federal funding.	Forest Bradley Wright	IRA & IIJA	There is naturally occurring EE in the forecast. Even outside of DSM, EE is taken into account. Additionally, Session XIII will provide a good opportunity to discuss further.
7	Which scenario is embedded in the reference load forecast?	Ryan Deyoe	IRA & IIJA	The Business as Usual Scenario was used for the reference load forecast.



	Was a specific load forecast used for the managed scenario as well?			A specific load forecast was not produced for the managed scenarios.
8	The 3.47 multiplier is explained for what it is, but it doesn't address how large the number is and the impact. Was that a straight calculation of a levelized fixed charge rate of 3.47 because that seems very high?	Phil Hayet	General Feedback	Ongoing capital is not exactly like O&M expense. It has insurance, taxes, etc. that are not like a fixed O&M. The 3.47 was an attempt to increase the size of the annual expenses to make them consistent with the fixed charge rate.
9	Follow up to question 13: The 3.47 number still seems high. Was there an additional multiplier included in that or is it a normal Dominion calculation of a fixed charge rate?	Phil Hayet	General Feedback	That is taking those expenses with a levelized fixed charge rate applied every year and converted to numbers that have the same NPV as that stream of capital cost dollars with the fixed charge rate applied.
10	Are DESC generators or PPA's with generators located only within service territory?	Eddy Moore	IRA – Energy Communities	DESC has used the service territory to represent where generators would interconnect with DESC to get this credit. A generator doesn't have to be exactly within the service territory; it just has to interconnect with DESC transmission or distribution.
11	I think it would be helpful to look at adding the census tracts for future coal retirements. I think this would give a clearer picture.	Ryan Deyoe	IRA – Energy Communities	Solar is not likely to site around Williams Station site, but for Wateree it is a good consideration. DESC will certainly consider those additions if and when they qualify as Energy Communities.
12	How do you see IIJA and electrification topics relating to the next IRP or to the resources that DESC might include in future IRPs?	Anna Sommer	IIJA and Electrification	DESC is considering IIJA programs and incorporating it into the IRP process where applicable.



13	What is your fallback position if there is a delay on the gas pipeline projects?	Phil Hayet	Gas Supply Planning	The IRP indicates that proceeding with ELG compliance activities with Williams allows it to operate prospectively past 2028, which alleviates some time pressure for activities that have to occur to support a Williams station retirement. The IRP contemplates different scenarios for a Wateree retirement by 2028. None of the Wateree Scenarios contemplate the necessity for incremental firm gas transportation.
14	I see Santee Cooper and DESC seeking upgrades on Transco. Does DESC see Transco as a more important focus or is DESC pursuing both strategies?	Eddy Moore	Gas Supply Planning	DESC is evaluating both Transco and Southern Natural as resources to support the Shared Resource. The Company is currently going through recently received responses. This is just the initial phase. DESC will also work with Carolina Gas Transmission. No final decision has been made between Transco, Southern, or something else.
15	It seems like the big pipeline upgrade is the pre-condition, but the environmental impacts within the state might be felt along the CGT. Is there anything you can say about scope or location of potential impacts?	Eddy Moore	Gas Supply Planning	That is one of the main reasons Canadys is the preferred site – because it is an existing brownfield site. However, there is additional infrastructure that will need to be built by Carolina Gas Transmission to serve the site. Because some transmission is existing and it is a brownfield site, the Company identified it as the preferred site.
16	Regarding the Mountain Valley Pipeline, is the 62,500 Dekatherms a per day amount? Is that enough to run a combined cycle at about 250 MW?	Anna Sommer	Gas Supply Planning	It is a per day amount. Yes. It is upstream supply that flows into existing capacity to feed existing generation.



17	Did you say there was a Southern Natural open season as well? Do you expect one?	Findlay Salter	Gas Supply Planning	No. Southern Natural could have an open season. A project the size of the Shared Resource in South Carolina could certainly be large enough to support an open season.
18	Regarding the TIA, you said the best case vs worst case is mainly dependent on if Winyah is retired or replaced with equivalent capacity at it's existing site?	Ryan Deyoe	2022 TIA Results and 2023 TIA Planning	Correct. That was the best case scenario because that's how the systems have been planned and how the projects are now. From a transmission standpoint that's really the pertinent factor.
19	I'm curious about the size of the capacity at Canadys driving the additional transmission upgrade costs. In every case it is approximately 750 MW in the 2022 TIA. Is there an insight into the driver of cost related to the extra capacity relative to the existing interconnection?	Ryan Deyoe	2022 TIA Results and 2023 TIA Planning	Load has continued to grow over time. There is significant transmission at Canadys which is a reason the Company perceives it a favorable site. However, with the load growth in the area, taking away Williams, and the additional generation at Canadys – it begins to add up. Transmission Planning could not break cost down completely by component, but the group was asked to study specific scenarios and provided results accordingly.
20	Could a battery go at the Canadys site?	Eddy Moore	2022 TIA Results and 2023 TIA Planning	Yes. If you look at all of the options, they need to add up to meet the reserve margin in the end. It is unlikely you can solve all of the flow problems in Charleston with a battery. It can be a part of the solution.
21	How is all of this information going to come together in reaching a decision for the Wateree retirements, the gas upgrades, and the transmission upgrades?	Phil Hayet	2022 TIA Results and 2023 TIA Planning	This is a complicated solution. That is why there are IRP updates every year. As the Company learns more, our planning assumptions will be updated.



22	Can you confirm whether or not Winyah is not being retired in 2028?	Ryan Deyoe	2022 TIA Results and 2023 TIA Planning	Subject to check, it is the Company's understanding that in Santee Cooper's planning date has been changed to 2030.
23	Will DESC be reporting Santee Cooper's transmission upgrade costs since the study is done together?	Ryan Deyoe	2022 TIA Results and 2023 TIA Planning	No. DESC will only report DESC costs and Santee Cooper will report its own costs in their IRP process.